

AMENDMENTS TO THE CLAIMS:

1-8. (Cancelled).

9. (Currently amended) A backlight apparatus comprising:
a wedge-type light guide comprising having a refractive index n_1 , and comprising having a top surface, a bottom surface and a side surface;
a light source for directing light to said side surface of said wedge-type light guide;
a light transmission layer comprising having a refractive index n_2 , which is smaller than said refractive index n_1 , and comprising having a top surface and a bottom surface, wherein said bottom surface of said light transmission layer is attached to said top surface of said wedge-type light guide; and
a plurality of prisms attached on said top surface of said light transmission layer for directing the incident light from said light transmission layer toward a light path along a direction of a normal line of said top surface of said light transmission layer and for controlling an angle spread of said incident light from the top surface of said light-transmission layer.

10. (Currently amended) The backlight apparatus according to Claim 9, wherein the range of said refractive index n_1 of said wedge-type light guide is substantially approximately 1.4 through substantially approximately 2.0, and the range of said refractive index n_2 of said light transmission layer is substantially approximately 1.2 through substantially approximately 1.4.

11. (Currently amended) The backlight apparatus according to Claim 10, wherein said refractive index n_1 of said wedge-type light guide is substantially approximately 1.49, and said refractive index n_2 of said light transmission layer is substantially approximately 1.3.

12-22. (Canceled).

23. (Currently amended) A liquid crystal display (LCD) apparatus comprising:
an LCD panel including an upper transparent substrate, a lower transparent substrate, and a liquid crystal material filled between said upper transparent substrate and said lower transparent substrate;
a light diffusing layer adjacent to said upper transparent substrate; and
a backlight apparatus adjacent to said lower transparent substrate, wherein said backlight apparatus comprises:

a wedge-type light guide comprising having a refractive index n_1 , and comprising having a top surface, a bottom surface and a side surface;

a light source for directing light to said side surface of said wedge-type light guide;

a light transmission layer comprising having a refractive index n_2 , which is smaller than said refractive index n_1 , and comprising having a top surface and a bottom surface, wherein said bottom surface of said light transmission layer is attached to said top surface of said wedge-type light guide; and

a plurality of prisms attached on said top surface of said light transmission layer for directing the incident light from said light transmission layer toward a light path along a

direction of a normal line of said top surface of said light transmission layer and for controlling
an angle spread of said incident light from the top surface of said light-transmission layer.

24. (Currently amended) The LCD apparatus according to Claim 23, wherein the range of said refractive index n_1 of said wedge-type light guide is substantially approximately 1.4 through substantially approximately 2.0, and the range of said refractive index n_2 of said light transmission layer is substantially approximately 1.2 through substantially approximately 1.4.

25. (Currently amended) The LCD apparatus according to Claim 24, wherein said refractive index n_1 of said wedge-type light guide is substantially approximately 1.49, and said refractive index n_2 of said light transmission layer is substantially approximately 1.3.

26-32. (Canceled).

33. (Currently amended) A light guide apparatus comprising:
a wedge-type light guide comprising having a refractive index n_1 , and comprising having a top surface, a bottom surface and a side surface;
a light transmission layer comprising having a refractive index n_2 , which is smaller than said refractive index n_1 , and comprising having a top surface and a bottom surface, wherein said bottom surface of said light transmission layer is attached to said top surface of said wedge-type light guide; and

a plurality of prisms attached on said top surface of said light transmission layer for directing the incident light from said light transmission layer toward a light path along a

direction of a normal line of said top surface of said light transmission layer and for controlling
an angle spread of said incident light from the top surface of said light-transmission layer.

34. (Canceled).

35. (New) The backlight apparatus according to Claim 9, wherein said plurality of prisms for controlling said angle spread of said incident light from the top surface of said light-transmission layer narrow said angle spread of said incident light from the top surface of said light-transmission layer.

36. (New) The liquid crystal display (LCD) apparatus according to claim 23, wherein said plurality of prisms for controlling said angle spread of said incident light from the top surface of said light-transmission layer narrow said angle spread of said incident light from the top surface of said light-transmission layer.

37. (New) The light guide apparatus according to claim 33, wherein said plurality of prisms for controlling said angle spread of said incident light from the top surface of said light-transmission layer narrow said angle spread of said incident light from the top surface of said light-transmission layer.

38. (New) The backlight apparatus according to Claim 9, further comprising a polarizer adjacent to said plurality of prisms,

wherein said incident light is emitted from said plurality of prisms in said direction of said normal line of said top surface of said light transmission layer to said polarizer.

39. (New) The liquid crystal display (LCD) apparatus according to claim 23, further comprising a polarizer adjacent to said plurality of prisms,

wherein said incident light is emitted from said plurality of prisms in said direction of said normal line of said top surface of said light transmission layer to said polarizer.

40. (New) The light guide apparatus according to claim 33, further comprising a polarizer adjacent to said plurality of prisms,

wherein said incident light is emitted from said plurality of prisms in said direction of said normal line of said top surface of said light transmission layer to said polarizer.

41. (New) A backlight apparatus comprising:

a wedge-shaped light guide comprising a refractive index n_1 ,

wherein said wedge-shaped light guide includes a top surface and a side surface, said side surface receiving light from a light source;

a light transmission layer comprising a refractive index n_2 and includes a top surface and a bottom surface, said bottom surface being disposed directly on said top surface of said wedge-shaped light guide, and

wherein said refractive index n_2 is less than said refractive index n_1 ; and means for directing the incident light from said light transmission layer toward a light path along a direction of a normal line of said top surface of said light transmission layer and for

controlling an angle spread of said incident light from the top surface of said light-transmission layer,

wherein said means for directing and controlling is disposed directly on said top surface of said light transmission layer.